

ABSTRACT OF THE DISCLOSURE

A nonvolatile semiconductor memory device has its output signals widely separated from each other to ensure its proper operation, does not require any high-accuracy resistance generating element, and realizes a high density memory capacity due to its simple memory cell construction in which provided are: a first wiring (21); a second wiring (25) perpendicular to the first wiring (21); a third wiring (35) parallel to the first wiring (21); a first memory element (28) between the first wiring (21) and the second wiring (25); and, a second memory element (38) between the second wiring (25) and the third wiring (35). Each of the memory elements (28, 38) includes an insulation film (13) sandwiched between two layers each constructed of a ferromagnetic thin film. The first memory element (28) stores data different from that stored in the second memory element (38).